STIC Search Report
EIC 2600

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STIC Database Tracking Number: 133503

TO: Lewis West
Location: CPK2 8D51
Art Unit: 2682
Friday, September 24, 2004

Case Serial Number: 09909246

From: Pamela Reynolds
Location: EIC 2600
PK2-3C03
Phone: 306-0255

Pamela.Reynolds@uspto.gov

Search Notes

Dear Lewis West

Please find attached the search results for 09909246. I used the search strategy I emailed to you to edit, which you did. I searched the standard Dialog files,IEEE, DTIC, INSPEC and the internet.

If you would like a re-focus please let me know.

Thank you.

sira
Search and Information Resources Administration

85

Access DB# 133503

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Lewis West Examiner #: 77862 Date: 9/21/04
Art Unit: 2682 Phone Number 308-9298 Serial Number: 09/909246
Location: 8D51 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Exciter System and method for communications within a closed space

Inventors (please provide full names):
George G. Chadwick

Earliest Priority Filing Date: 6/25/1999

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Claim 1 Evanescent wave communications that are NOT optical

Claim 15 A Semicircular conductor with a rim facing a conductive framework

****

STAFF USE ONLY		Type of Search		Vendors and cost where applicable	
Searcher:	Pamela Reynolds	NA Sequence (#)		STN	
Searcher Phone #:	306-0255	AA Sequence (#)		Dialog	✓
Searcher Location:	PK2 3C03	Structure (#)		Questel/Orbit	
Date Searcher Picked Up:	9-24-04 10:30	Bibliographic	✓	Dr.Link	
Date Completed:	9-24-04 11:30	Litigation		Lexis/Nexis	
Searcher Prep & Review Time:	5	Fulltext	✓	Sequence Systems	
Clerical Prep Time:		Patent Family		WWW/Internet	✓
Online Time:	40	Other		Other (specify)	✓

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  File 118:ICONDA-Intl Construction 1976-2004/Aug
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      Set  Items  Description
      ---  -----  -----------

Set      Items   Description
S1       20863   EVANESCEN?
S2         786   S1 AND (COMMUNICATION? OR TELECOMMUNICATION? OR NETWORK?)
S3         371   S2 NOT OPTICAL
S4          45   RIM AND (FAC???? OR OPPOSITE? OR OPPOSING) AND (FRAMEWORK -
               OR FRAME()WORK)
S5           9   (SEMICIRCULAR OR SEMI()CIRCULAR)(3N)(CONDUCTOR? OR EXCITER-
               ?)
S6           1   (CHADWICK, G? OR CHADWICK G?)
S7           0   S3 AND S4
S8           0   S3 AND S5
S9           0   S6 NOT CHADWICK()GROUP
S10          0   S4 AND S5
```

T-3

COUPLING COEFFICIENT BETWEEN MAGNETIC LOOP AND A DIELECTRIC RESONATOR IN AN EVANESCENT WAVEGUIDE

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This paper studies the end coupling between a magnetic loop and a dielectric resonator housed in an evanescent metallic waveguide.

A theoretical and experimental analysis of the variations of the external quality factor as a function of the distance between the loop and the resonator is presented. The influence of the interstage coupling between two dielectric resonators on the end coupling will be also evaluated.

INTRODUCTION.

The bandpass dielectric resonator filter configuration can be generally defined as a section of evanescent mode waveguide in which the dielectric resonators are housed {1}. The orientation of dielectric resonators can either be axial or transverse {2}. The end resonators are either coupled to external sources by means of propagating waveguides {3} or coaxial transmission loops. In this paper the coupling is achieved by the dielectric resonator (at resonance) to the coaxial line, by means of a magnetic loop ; through the evanescent field of the waveguide. In other words, the waveguide magnetic fields excited by the resonator magnetic dipole will be coupled to the loop when threading it, as the plane of the loop is normal to the x, y plane of the guide as shown in figure 1 corresponding to the case of a rectangular wave guide.

EQUIVALENT CIRCUIT. INPUT IMPEDANCE.

The loop resonator cavity system in general, can be representated by the equivalent circuit shown in figure 2. The dielectric resonator is acting on the dipolar TE_{01p} mode. L_m is the mutual self inductance.

Using the equivalent circuit of figure 2. We can evaluate the input impedance Z_{in}.

$$\begin{aligned} V_1 &= j\omega L_p I_p + j\omega L_m I_r \\ V_2 &= j\omega L_m I_p + j\omega L_r I_r \\ V_2 &= -R_r I_r - \frac{1}{j\omega C_r} I_r \end{aligned} \qquad 1.$$

The indexes p and r refer respectively to the loop and to the dielectric resonator :

$$Z_{in} = \frac{V_1}{I_p}$$

$$Z_{in} = j\omega L_p + \frac{\omega^2 L_m^2}{R_r + j(\omega L_r - \frac{1}{C_r\omega})} \qquad 2.$$

The first term in equation 2 is neglected, considered very small compared to the second term then z_{in} reduces to :

$$Z_{in} = \frac{\omega^2 L_m^2}{R_r + j(\omega L_r - \frac{1}{C_r\omega})}$$

at resonance $$Z_{in}\Big|_{\omega_o} = \frac{\omega_o^2 L_m^2}{R_r} \qquad 3.$$

Since the unloaded quality factor of the TE_{01p} mode of the dielectric resonator verifies :

$$Q_o = \frac{\omega_o L_r}{R_r}$$

$$Z_{in} = \frac{L_m^2}{L_r}\omega_o Q_o \qquad 4.$$

For $\frac{L_m^2}{L_r}$ factor evaluation in terms of the field contribution to coupling, the TE_{01p} mode of the dielectric resonator is looked at as a magnetic dipole. The voltage V induced in the magnetic loop due to current I_r in the resonator can be expressed by :

$$V = j\omega L_m I_r = j\omega \mu_o H_p A_p \qquad 5.$$

H_p : field values in the magnetic loop due to resonator current. For small magnetic loops H_p can be taken in a first approximation to be the value at the center of the loop of area A_p.

If W_r is the stored energy in the dielectric resonator :

$$W_r = \frac{1}{2} L_r I_r^2 \qquad 6.$$

From 4, 5, 6 we obtain :

$$\frac{L_m^2}{L_r} = \frac{(\mu_o H_p A_p)^2}{2 W_r} \qquad 7.$$

and Z_{in} can be written :

$$Z_{in} = Q_o \frac{(\mu_o H_p A_p)^2}{2 W_r} \qquad 8.$$

EVALUATION OF H_p.

The magnetic field at the center of the loop H_p due to resonator current is taken as the magnetic field of waveguide evanescent modes excited by the resonator dipole at waveguide center where the resonator is located.

In this paper we only consider the case of the transverse orientation of the dielectric resonator in a rectangular waveguide.

Since transverse orientation is considered, then M_r the equivalent magnetic dipole of the $TE_{01\delta}$ mode of the dielectric resonator will excite only those modes having H components in the transversal plane, that is those having $h_x \neq 0$ at waveguide center so m must be odd and n even. $_{m\,n}$
Among all these modes we only consider this which has the lowest cut off frequency so the TE_{10} mode.

The normalized x directed field component within the rectangular guide is :

$$h_x = \left\{ \frac{\lambda_{10}\,\Gamma}{j\, ab\, \pi z_o} \right\}^{1/2} \sin \pi \frac{x_1}{a} \qquad 9.$$

For resonator located at guide center $x_1 = \pm \frac{a}{2}$

$$h_x = \left\{ \frac{\lambda_{10}\,\Gamma}{j\, ab\, \pi\, z_o} \right\}^{1/2} \qquad 10.$$

$$\Gamma : \text{evanescent constant} = \alpha_{10} = \frac{2\pi}{\lambda_{10}} \left[1 - \left\{ \frac{\lambda_{10}}{c}\, 2\pi\omega_o \right\}^2 \right]^{\frac{1}{2}}$$

λ_{10} wavelength of TE_{10} mode in rectangular guide
$\lambda_{10} = 2a$

$Z_o = 377\ \Omega$

The total field H_x at a distance S between the centers of the loop and the resonator is given by :

$$H_x = a_{t_{10}}\, h_x\, e^{-\alpha_{10} s} \qquad 11.$$

The amplitude $a_{t_{10}}$ of forward directed TE_{10} wave excited by an x oriented magnetic dipole M_r is defined by the following equation :

$$a_{t_{10}} = \frac{-\omega_o\, \mu_o\, M_r}{2} \left\{ \frac{j\, \lambda_{10}\, \alpha_{10}}{a\, b\pi\, z_o} \right\}^{1/2} \qquad 12.$$

Relating equation (8) (10) (11) (12) the input impedance is expressed by :

$$Z_{in} = Q_o\, \omega_o \frac{\mu_o^2 A_p^2}{2\, W_r} \left\{ a_{t_{10}}\, h_x\, e^{-\alpha_{10} s} \right\}^2 \qquad 13.$$

If Z_c is the terminating characteristic impedance of the coaxial line evaluated at $50\,\Omega$ being the interior source of dissipation and Z_{in} is the exterior impedance looked at from the coaxial line :

$$Q_{ext} = \frac{Q_o}{\beta} \qquad \beta = \frac{Z_{in}}{Z_c}$$

$$Q_{ext} = \frac{2\, W_r\, Z_c}{\omega_o\, \mu_o\, A_p^2\, H_x} \qquad 14.$$

In this expression H_x is evaluated from (11) taking into account (12). W_r and M_r are evaluated by using the finite difference method {4} . Q_{ext} is computed by the equation (14) for loop diameter of 3.5 mm and 5 mm. Graphs of curves 3 show the variations of Q_{ext} as a function of spacing s.

Practical measurement of Q_e is determined for a 3.5 mm loop as well a 5.0 mm in the graphs of curve 4 and in curve 5. Loop thickness is also considered in curve 5 where Q_{ext} is calculated for (5 ± 0.2) mm and (3.5 mm ± 0.2 m) loop diameter.

INFLUENCE OF THE INTERSTAGE COUPLING ON THE END COUPLING.

The coupling coefficient between a pair of dielectric resonators is expressed by the equation {2} :

$$k(s) = \frac{\mu_o\, H_x\, M_r}{2\, W_r} \qquad 15.$$

The external Q given by (14) can be related to k(s), through the magnetic field H_x which is assumed the same in keeping the spacing between loop and resonator equal to the spacing between the dielectric resonators (s) and assuming the loop surface comparable to the dielectric resonator :

$$Q_{ext} = \frac{F\, Z_c}{\mu_o\, \omega_o\, A_p^2\, k(s)^2} \qquad 16.$$

$$F = \frac{\mu_o M_r^2}{2\, W_r}$$

Graphs of curve 6 shows the variations of Q_{ext} computed taking into account or not the coupling between the pair of dielectric resonators.

CONCLUSION.

The coupling between a magnetic loop and a dielectric resonator contained in a evanescent waveguide has been evaluated. Theoretical and experimental results agree well. The influence of the interstage coupling on the coupling coefficient between the loop and the resonator has been computed.

REFERENCES.

1 - H.C.WANG and C.L. REN - Dielectric resonators filters for communication systems. Proceedings of the 1981 National Telecommunications Conference NEW-ORLEANS - December 1981.

2 - J.K. PLOURDE - C.L. REN - Application of dielectric resonators in microwave components. IEEE Microwave Theory and Techniques MTT-29 N°8 August 1981 p.754

3 - KONISHI - External Q factor of a TE_{01} dielectric resonator in a TE_{10} waveguide bandpass filter. IEEE Transactions - JAPAN January 1976.

4 - P. GUILLON, Y.GARAULT, S.MEKERTA - Microstrip bandstop filter using a dielectric resonator. IEE Proceedings - H - Microwaves Optics and Antennas Vol. 128 N° 3 p.151 June 1981.

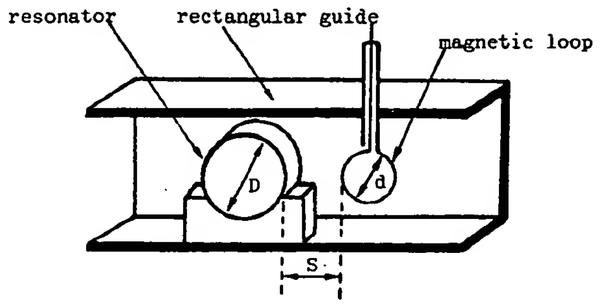

Figure 1 : Resonator in a rectangular evanescent waveguide.

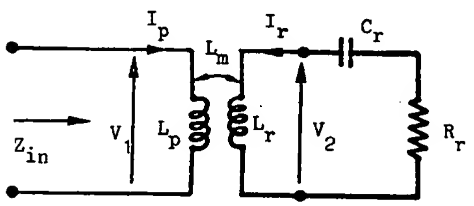

Figure 2 : Equivalent circuit of the coupling loop resonator.

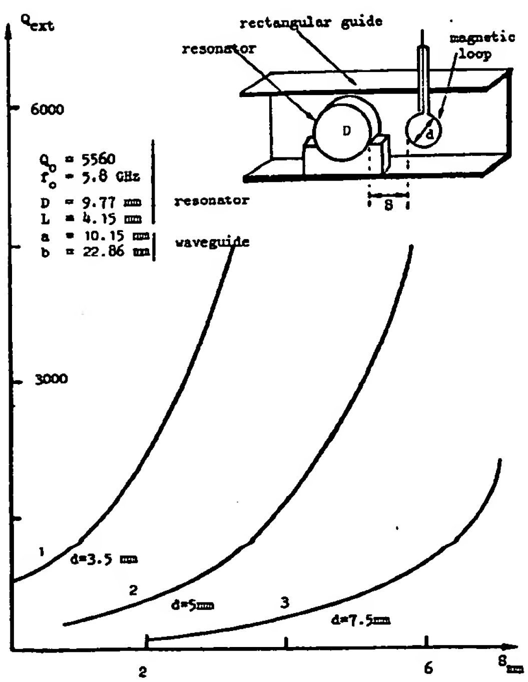

Figure 3 : Distance S in mm between loop and resonator.

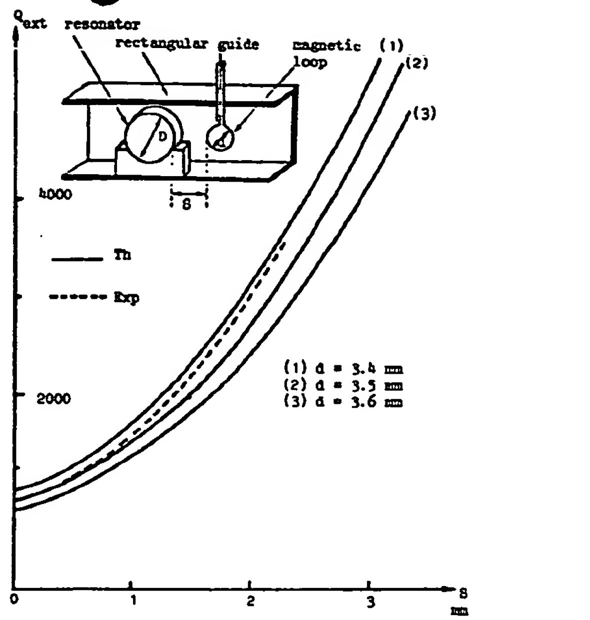

Figure 4 : Q_{ext}/spacing (S) for 3.5mm loop diameter.

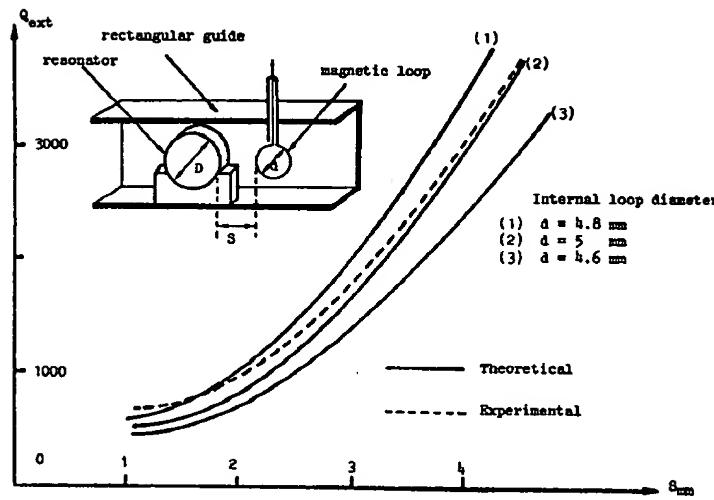

Figure 5 : Q_{ext}/spacing (S) for loop of 5.0mm diameter

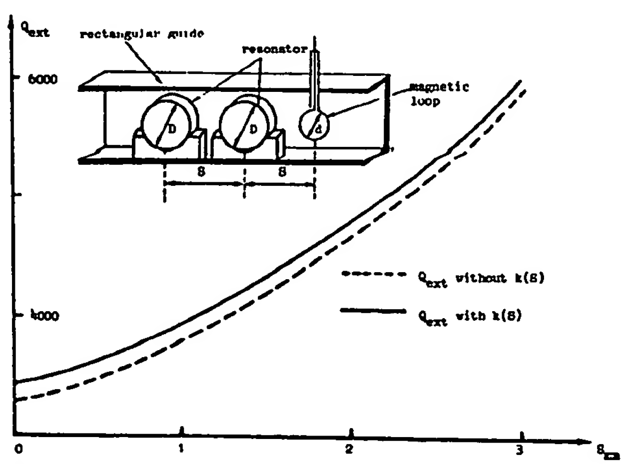

Figure 6 : Q_{ext} for loop of 3.5 mm diameter

3P09

Design and Operation of a 70 GHz Second Harmonic four Cavity Gyroklystron for Radar Applications

M. Walter, W. Lawson, J.P. Calame, M. Garven and V. L. Granatstein, University of Maryland, College Park, MD 20742, USA

Design and Operation of a 70 GHz Second Harmonic Four Cavity Gyroklystron for Radar Applications*

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At the University of Maryland, we have been investigating the feasibility of using gyroklystrons and gyrotwystrons as drivers for linear colliders and advanced accelerators for a number of years.[1] With a two-cavity second harmonic tube, we produced over 32 MW of peak power at 19.76 GHz with nearly 30% efficiency via the interaction with a 450 kV, 240 A beam. The first cavity was driven at 9.88 GHz in the TE_{011} mode. The second harmonic output cavity resonated in the TE_{021} mode at 19.76 GHz.

In this paper, we present the application of this frequency-doubling technology to an existing first harmonic gyroklystron which has been under investigation at the Naval Research Laboratory.[2] This system has been successfully operated with from 2-5 cavities. In a two cavity system, a peak power of 210 kW was achieved near 35 GHz with 37% efficiency and a gain near 24 dB. The bandwidth was approximately 0.36%. The nominal beam parameters include a voltage of 70 kV, a current of 8 A, and a perpendicular to parallel velocity ratio of about 1.35.

In our experiment, we utilize the first harmonic input and gain cavities, but replace the penultimate and output cavities with ones that are designed to operate in the TE_{021} mode near 70 GHz. About 140 kW of power with an efficiency near 25% is predicted via MAGYKL simulations. The complete design simulations and cold test results for this system will be presented. If viable, the experimental hot test results will also be described.

1. V. L. Granatstein and W. Lawson, "Gyro-Amplifiers as RF Drivers for Multi-TeV Linear Colliders," *IEEE Trans. Plasma Sci.* 24 (1996) 648.
2. J. J. Choi, et al., "Experimental Investigation of a High Power, Two-Cavity, 35 GHz Gyroklystron Amplifier, *IEEE Trans. Plasma Sci.* 26 (1998) 416.

*This work is supported by the Naval Research Laboratory under grant N00173981G000.

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3P10

Cavity Testing for W-band Gyroklystron Amplifiers

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Cavity Testing for W-band Gyroklystron Amplifiers

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The Naval Research Laboratory has undertaken a 94 GHz gyroklystron amplifier development program for radar applications. This program comprises both in-house development as well as cooperative development between NRL, Communication and Power Industries, Litton Electron Devices, and the University of Maryland.

These devices utilize multiple cavities tuned to different frequencies, typically in the range of 93 to 95 GHz to achieve the desired gain, power, and bandwidth requirements. The cavities operate in the TE_{01} mode with Q's in the range of 100 - 200. Due to the sensitivity of cavity performance characteristics to manufacturing tolerances, it is essential that the cavity characteristics be measured after assembly. For the NRL/industrial amplifier, space considerations preclude usage of apertures in cavities for diagnostics, so we rely on TE_{01} axial transmission evanescently coupled through cavity irises to determine the resonant frequency and Q. Specifics of the measurement depend on the cavity type to be measured; input, intermediate, or output.

Transmission or reflection data are taken using an HP 8510 vector network analyzer with a W - band test set. Marie converters are used to convert from the TE_{10} in WR10 rectangular waveguide to the TE_{01} mode in 0.2" dia. circular guide. To allow propagation of the TE_{01} mode in waveguide diameters below air-loaded cutoff, diagnostic probes were fabricated using a dielectric loaded circular waveguide with approximately the same diameter as the cavity iris. Each waveguide is connected to a nonlinear transition region to couple a TE_{01} wave in 0.2" air loaded waveguide to a TE_{01} wave in 0.109" diameter Rexolite loaded waveguide with miminal reflection and mode conversion.

Measurements are found to be highly sensitive to mismatches at the -20 dB level. With precision manufacture of the dielectric probes, careful alignment, and TRL calibration at the probe tips to minimize mismatch effects, consistent and reliable results have been obtained. Details of dielectric probe development, testing methodology and typical data will be presented.

This work was supported by the Office of Naval Research.

File 344:Chinese Patents Abs Aug 1985-2004/May
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File 347:JAPIO Nov 1976-2004/May(Updated 040903)
(c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200461
(c) 2004 Thomson Derwent

Set	Items	Description
S1	1497	EVANESCEN?
S2	177	S1 AND (COMMUNICATION? OR TELECOMMUNICATION? OR NETWORK?)
S3	49	S2 NOT OPTICAL
S4	63	RIM AND (FAC???? OR OPPOSITE? OR OPPOSING) AND (FRAMEWORK - OR FRAME()WORK)
S5	91	(SEMICIRCULAR OR SEMI()CIRCULAR)(3N)(CONDUCTOR? OR EXCITER-?)
S6	0	(CHADWICK, G? OR CHADWICK G?)
S7	25800	IC=H04H?
S8	0	S3 AND S4 AND S5
S9	0	S3 AND (S4 OR S5)

File 348:EUROPEAN PATENTS 1978-2004/Sep W02

File 349:PCT FULLTEXT 1979-2002/UB=20040923,UT=20040916

Set	Items	Description
S1	2957	EVANESCEN?
S2	19	S1(5N)(COMMUNICATION? OR TELECOMMUNICATION? OR NETWORK?)
S3	2	S2 NOT OPTICAL
S4	4	RIM(3N)(FAC???? OR OPPOSITE? OR OPPOSING)(5N)(FRAMEWORK OR FRAME()WORK)
S5	54	(SEMICIRCULAR OR SEMI()CIRCULAR)(3N)(CONDUCTOR? OR EXCITER-?)
S6	0	(CHADWICK, G? OR CHADWICK G?)
S7	3435	IC=H04H?
S8	0	S3(S)S4(S)S5
S9	0	S3(S)(S4 OR S5)
S10	6	S3 OR S4

10/3,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

01667098
Monitoring and control system for a power distribution panel switchgear
Einrichtung zur Steuerung und Uberwachung einer elektrischen Energieverteilungsanlage
Dispositif de controle et de surveillance d'un systeme de distribution d'energie electrique
PATENT ASSIGNEE:
Hitachi, Ltd., (204145), 6 Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo 101-8010, (JP), (Applicant designated States: all)
INVENTOR:
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Fukai, Masayuki, Hitachi, Ltd., Intell. Property, Group, New Marunouchi Bldg, 5-1 Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8220, (JP)
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Shimizu, Katsuhito, Hitachi, Ltd., Intel. Property, Group, New Marunouchi Bldg, 5-1 Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8220, (JP)
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Namba, Shigeaki, Hitachi, Ltd., Intell. Property, Group, New Marunouchi Bldg, 5-1 Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8220, (JP)
Kimura, Toru, Hitachi, Ltd., Intel. Property Group, New Marunouchi Bldg., 5-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8220, (JP)
LEGAL REPRESENTATIVE:
Strehl Schubel-Hopf & Partner (100941), Maximilianstrasse 54, 80538 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 1369975 A2 031210 (Basic)
EP 1369975 A3 040107
APPLICATION (CC, No, Date): EP 2003011755 030523;
PRIORITY (CC, No, Date): JP 2002165046 020606
DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK
INTERNATIONAL PATENT CLASS: H02J-013/00
ABSTRACT WORD COUNT: 140
NOTE:
Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200350	1610
SPEC A	(English)	200350	8602
Total word count - document A			10212
Total word count - document B			0
Total word count - documents A + B			10212

...SPECIFICATION total configuration diagram of the monitoring and control system.

Fig. 3 illustrates the principles of **evanescent communication** technology.

Fig. 4 is a flowchart explaining the operation of a communication module.

Fig. 5...

...and the controller 20 is connected to a plurality of switch gears 34 by

of the first embodiment described earlier...

...module 82 being connected to a communication module 38 of a switch gear 34 via **evanescent communication** 32 and the analog/digital input/output circuit 86 being connected to a plurality of...

...signals with the switch gear 34 to be implemented either without, in this way, using **evanescent communication** , or by, as with the conventional practice, using process cables in conjunction with **evanescent communication** .

In addition, commands and information can be directly exchanged between the communication module 82 of...

...and the controller 20 is connected to a plurality of switch gears 34 by using **evanescent communication** 32 as a means of wireless **communication** in an **evanescent** mode which propagates electromagnetic waves via the structures of the corresponding building.

The communication module...

...which the control commands that have been created by the CPU 22 are output in **evanescent** mode to the **communication** module 38 of the switch gear 34.

The switch gear 34 comprises the above-mentioned communication module 38, a digital input/output circuit 44, and a power circuit 46. The **communication** module 38 has an **evanescent communication** transmitting/receiving section and the like, exchanges operation/monitoring-associated commands with the communication module...

...CLAIMS monitoring command output means and said control command output means are connected by using an **evanescent** mode as a **communication** means for information exchange between both means.

11. A monitoring and control system comprising;
an...

...monitoring information input means, and said control command output means are connected by using an **evanescent** mode as a **communication** means for information exchange between the three means.

12. An equipment diagnostic system comprising;
a...

10/3,K/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00853677
HORIZONTAL AXIS WIND TURBINE
WINDRAD MIT WAAGERECHTER WELLE
EOLIENNE A AXE HORIZONTAL
PATENT ASSIGNEE:
Gislason, Nils Erik, (2313690), Lyngholt 2, 603 Akureyri, (IS), (Proprietor designated states: all)
INVENTOR:
Gislason, Nils Erik, Lyngholt 2, 603 Akureyri, (IS)
LEGAL REPRESENTATIVE:
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PATENT (CC, No, Kind, Date): EP 854981 A1 980729 (Basic)
EP 854981 B1 030108
WO 97013979 970417

APPLICATION (CC, No, Date): EP 95932877 951013; WO 95IB871 951013
PRIORITY (CC, No, Date): EP 95932877 951013; WO 95IB871 951013
DESIGNATED STATES: AT; BE; DE; DK; ES; FR; GB; GR; IE; IT; NL; PT; SE
INTERNATIONAL PATENT CLASS: F03D-001/00
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200302	1123
CLAIMS B	(German)	200302	1266
CLAIMS B	(French)	200302	1233
SPEC B	(English)	200302	2871
Total word count - document A			0
Total word count - document B			6493
Total word count - documents A + B			6493

...SPECIFICATION stator is essentially stationary and is mounted on supports that attach the stator to the **framework** **opposite** the **rim** . The supports on which the stator is mounted adjust to ensure a constant distance between...spokes 86 and the vanes 80.

The electricity-generating stator 16 is attached to the **framework** 12 **opposite** the rotating **rim** 76, whereby the plurality of magnets 84 on the rotating rim 76 pass by the...

...CLAIMS stator (16); and
a stator support mechanism (74,78) attaching said stator (16) to said **framework** (12) **opposite** said **rim** (76), said stator support mechanism (74, 78) dimensioned and configured to flex to maintain said...wind-induced rotation of said rotor (14);
an electricity-generating stator (16) attached to said **framework** (12) **opposite** said **rim** (76), whereby said plurality of magnets (84) on said rim (76) pass by said stator...

10/3,K/3 (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00556410
COLLAPSIBLE CANOPY FRAMEWORK HAVING CAPTURED SCISSOR ENDS WITH NON-COMPRESSIVE PIVOTS
FALTBARE DACHKONSTRUKTION MIT GELENKIG VERBUNDENEN ENDEN, DIE MIT NICHTZUSAMMENDRUCKBAREN DREHPUNKTEN AUSGESTATTET SIND
STRUCTURE D'ABRI EN TOILE PLIABLE A EXTREMITES ARTICULEES RATTACHEES DOTEES **DE PIVOTS NON COMPRESSIFS**
PATENT ASSIGNEE:
Lynch, James Paul, (1009360), 13 South Field, Lakewood Colorado 80226, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;MC;NL;SE)
INVENTOR:
Lynch, James Paul, 13 South Field, Lakewood Colorado 80226, (US)
LEGAL REPRESENTATIVE:
Lawrence, Malcolm Graham (47878), Hepworth, Lawrence, Bryer & Bizley Merlin House Falconry Court Baker's Lane, Epping Essex CM16 5DQ, (GB)
PATENT (CC, No, Kind, Date): EP 565629 A1 931020 (Basic)
EP 565629 A1 940608
EP 565629 B1 981125
WO 9212313 920723
APPLICATION (CC, No, Date): EP 92904226 911223; WO 91US9704 911223

PRIORITY (CC, No, Date): US 632767 910104
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; MC; NL; SE
INTERNATIONAL PATENT CLASS: E04H-015/50; E04H-015/58;
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9848	2185
CLAIMS B	(German)	9848	2070
CLAIMS B	(French)	9848	2400
SPEC B	(English)	9848	5866
Total word count - document A			0
Total word count - document B			12521
Total word count - documents A + B			12521

...SPECIFICATION this rim. Likewise, slide mounts 62 and lower floating mounts 65 form a relatively uninterrupted **rim** around an **opposite** end portion of the **framework** unit in the collapsed state. While not shown, it should be understood that lower central...

10/3,K/4 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

01075408 **Image available**
SYSTEMS AND METHODS FOR A PROTOCOL GATEWAY
SYSTEMES ET PROCEDES POUR PASSERELLE DE PROTOCOLES
Patent Applicant/Assignee:
AKONIX SYSTEMS INC, 600 B Street, Suite 1800, San Diego, CA 92101, US, US (Residence), US (Nationality)
Inventor(s):
POLING Robert, 9450 Fuerte Drive, La Mesa, CA 91941, US,
PUGH Richard S, 15906 Bent Treet Road, Poway, CA 92064, US,
MILLER Randy, 1636 La Corta Street, Lemon Grove, CA 91945, US,
SHAPIRO Dmitry, 6214 College Avenue, San Diego, CA 92120, US,
Legal Representative:
GILLESPIE Noel C (agent), Paul, Hastings, Janofsky & Walker LLP, P.O. Box 919092, San Diego, CA 92191-9092, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 2003105015 A1 20031218 (WO 03105015)
Application: WO 2003US18311 20030610 (PCT/WO US0318311)
Priority Application: US 2002387761 20020610; US 2002167228 20020610; US 2002167229 20020610; US 2003445648 20030207
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 16373

Fulltext Availability:
  Detailed Description

Detailed Description
... information.

[058] Logging module 470 provides a way to record messages comprising what is otherwise **evanescent communication** between sending client devices 170 and receiving client devices. Such persistent recording allows for forensic...

10/3,K/5 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00373236 **Image available**
HORIZONTAL AXIS WIND TURBINE
EOLIENNE A AXE HORIZONTAL
Patent Applicant/Assignee:
  GISLASON Nils Erik,
Inventor(s):
  GISLASON Nils Erik,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9713979 A1 19970417
  Application: WO 95IB871 19951013 (PCT/WO IB9500871)
  Priority Application: WO 95IB871 19951013
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
  AL AM AU BB BG BR BY CA CN CZ FI GE HU IS JP KG KP KR KZ LK LR LT LV MD MG MK MN MX NO NZ PL RO RU SG SI SK TJ TM TT UA US UZ VN KE MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 5323
Fulltext Availability:
  Detailed Description
  Claims

English Abstract
  ...induces rotation of the rim. The stator is essentially stationary and is mounted on the **framework opposite** the **rim** . As magnets on the rotating **rim** pass by the stator, electricity is generated. The stator uses the pull of the magnets...

Detailed Description
... stator is essentially stationary and is mounted on supports that attach the stator to the **framework opposite** the **rim** . The supports on which the stator is mounted adjust to ensure a constant distance between...spokes 86 and the vanes 80.

The electricity-generating stator 16 is attached to the **framework** 12 **opposite** the rotating **rim** 76, whereby the plurality of magnets 84 on the rotating rim 76 pass by the...

Claim
... rim having a plurality of magnets;

an electricity-crenerating stator that is
attached to said **framework** **opposite** said rotating **rim** ,
whereby said plurality of magnets on said rotating rim
pass by said stator when wind...in directions parallel with said rim,
while
maintaining said stator a constant distance from said
rim ; and
an electricity-generating stator attached to said
framework **opposite** said rotating **rim** , whereby said
plurality of magnets on said rotating rim pass by said
stator, when wind...

...rim;
an electricity-generazIng stator; and
a stator support mechanism attaching said stator to
said **framework** **opposite** said **rim** , said stator support
mechanism maintaining said stator in alignment with
said rotor.
2 The horizontal...to maximize wind-induced rotation of said
rotor;
an electricity-generating stator attached to said
framework **opposite** said **rim** , whereby said plurality of
magnets on said rim pass by said stator, when wind
induces...

10/3,K/6 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00215096
COLLAPSIBLE CANOPY FRAMEWORK HAVING CAPTURED SCISSOR ENDS WITH NON-COMPRESSIVE PIVOTS
STRUCTURE D'ABRI EN TOILE PLIABLE A EXTREMITES ARTICULEES RATTACHEES DOTEES DE PIVOTS NON COMPRESSIFS
Patent Applicant/Assignee:
LYNCH James P,
Inventor(s):
LYNCH James P,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9212313 A1 19920723
Application: WO 91US9704 19911223 (PCT/WO US9109704)
Priority Application: US 91767 19910104
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AT AU BE CA CH DE DK ES FR GB GR IT JP LU MC NL SE
Publication Language: English
Fulltext Word Count: 8556

Fulltext Availability:
Detailed Description

Detailed Description
... this rim. Likewise, slide
mounts 62 and lower floating mounts 65 form a relatively
uninterrupted **rim** around an **opposite** end portion of the
framework unit in the collapsed state, While not shown, it
should be understood that lower central...
?

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File   9:Business & Industry(R) Jul/1994-2004/Sep 23
         (c) 2004  The Gale Group
File  15:ABI/Inform(R) 1971-2004/Sep 23
         (c) 2004 ProQuest Info&Learning
File  16:Gale Group PROMT(R) 1990-2004/Sep 24
         (c) 2004 The Gale Group
File  20:Dialog Global Reporter 1997-2004/Sep 24
         (c) 2004 The Dialog Corp.
File  47:Gale Group Magazine DB(TM) 1959-2004/Sep 24
         (c) 2004 The Gale group
File  75:TGG Management Contents(R) 86-2004/Sep W2
         (c) 2004 The Gale Group
File  80:TGG Aerospace/Def.Mkts(R) 1986-2004/Sep 24
         (c) 2004 The Gale Group
File  88:Gale Group Business A.R.T.S. 1976-2004/Sep 23
         (c) 2004 The Gale Group
File  98:General Sci Abs/Full-Text 1984-2004/Aug
         (c) 2004 The HW Wilson Co.
File 112:UBM Industry News 1998-2004/Jan 27
         (c) 2004 United Business Media
File 141:Readers Guide 1983-2004/Aug
         (c) 2004 The HW Wilson Co
File 148:Gale Group Trade & Industry DB 1976-2004/Sep 24
         (c)2004 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
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         (c) 2004 The Gale Group
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         (c) 2004 The Dialog Corp.
File 369:New Scientist 1994-2004/Sep W2
         (c) 2004 Reed Business Information Ltd.
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File 484:Periodical Abs Plustext 1986-2004/Sep W3
         (c) 2004 ProQuest
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         (c) 2004 The HW Wilson Co
File 570:Gale Group MARS(R) 1984-2004/Sep 24
         (c) 2004 The Gale Group
File 608:KR/T Bus.News. 1992-2004/Sep 24
         (c)2004 Knight Ridder/Tribune Bus News
File 620:EIU:Viewswire 2004/Sep 17
         (c) 2004 Economist Intelligence Unit
File 613:PR Newswire 1999-2004/Sep 24
         (c) 2004 PR Newswire Association Inc
File 621:Gale Group New Prod.Annou.(R) 1985-2004/Sep 24
         (c) 2004 The Gale Group
File 623:Business Week 1985-2004/Sep 20
         (c) 2004 The McGraw-Hill Companies Inc
File 624:McGraw-Hill Publications 1985-2004/Sep 20
         (c) 2004 McGraw-Hill Co. Inc
File 634:San Jose Mercury  Jun 1985-2004/Sep 23
         (c) 2004 San Jose Mercury News
File 635:Business Dateline(R) 1985-2004/Sep 24
         (c) 2004 ProQuest Info&Learning
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         (c) 2004 The Gale Group
File 647:CMP  Computer Fulltext 1988-2004/Sep W2
         (c) 2004 CMP Media, LLC
File 696:DIALOG Telecom. Newsletters 1995-2004/Sep 23
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        (c) 2004 The Dialog Corp.
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        (c) 2004 IDG Communications
File 810:Business Wire 1986-1999/Feb 28
        (c) 1999 Business Wire
File 813:PR Newswire 1987-1999/Apr 30
        (c) 1999 PR Newswire Association Inc
File 587:Jane`s Defense&Aerospace 2004/Aug W4
        (c) 2004 Jane`s Information Group

Set     Items   Description
S1      10641   EVANESCEN?
S2         13   S1(5N)(COMMUNICATION? OR TELECOMMUNICATION? OR NETWORK?)
S3         12   S2 NOT OPTICAL
S4          3   RIM(3N)(FAC???? OR OPPOSITE? OR OPPOSING)(5N)(FRAMEWORK OR
             FRAME()WORK)
S5          4   (SEMICIRCULAR OR SEMI()CIRCULAR)(3N)(CONDUCTOR? OR EXCITER-
             ?)
S6          2   (CHADWICK, G? OR CHADWICK G?)
S7          0   IC=H04H?
S8          0   S3(S)S4(S)S5
S9          0   S3(S)(S4 OR S5)
S10         0   S3(S)S4(S)S5
S11         0   S3(S)(S4 OR S5)
S12         0   S6 AND S3
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